Deliberative Document: Do not quote or cite

February 28, 2013

EPA Region 10

Responsiveness Summary from Public Input on September 2012 document

"Relation Between Nitrate in Water Wells and Potential Sources in the Lower Yakima Valley, WA"

Table of Contents

I. Study Design

- 1. Groundwater flow direction
- 2. Well construction information
- 3. Residential well integrity
- 4. Sampling design
- 5. Number and frequency of sampling
- 6. Soil samples
- 7. Lagoon samples
- 8. Historical data
- 9. Sources of nitrate
- 10. Manure and synthetic fertilizer

II. General Analyses

- 1. Background
- 2. Major ion and trace elements
- 3. Isotopic analysis
- 4. Age dating
- 5. Fate and transport

III. Dairies

- 1. General: Lagoon leakage estimates
- 2. Haak Dairy: Upgradient well
- 3. Haak Dairy: Pesticides
- 4. Haak Dairy: Pharmaceuticals
- 5. Dairy Cluster: Upgradient well
- 6. Dairy Cluster: Pesticides
- 7. Dairy Cluster: Pharmaceuticals
- 8. Dairy Cluster: Hormones

IV. Irrigated Croplands

V. Septic Systems

VI. Quality Assurance and Quality Control

- 1. Quality assurance project plan
- 2. Quality control and data usability
- 3. Data quality: Relative percent differences
- 4. Analytical data uncertainties and limitations
- 5. Data validation memorandum
- 6. Field duplicates
- 7. QAPP completeness
- 8. Detection limits
- 9 Estimated data
- 10. Nitrate/nitrogen
- 11. Pharmaceutical/Hormones
- 12. Herbicides

Deliberative Document: Do not quote or cite

February 28, 2013

(b)(5)

- 13. Bacterial
- 14. Peer Review



14. Peer Review

Several commenters indicated the peer review conducted for the report was inadequate because: EPA did not follow its own peer review guidance; that the report was classified as "influential" by OMB and required more extensive review; EPA's selection of peer reviewers was not transparent and all four peer reviewers were from federal agencies; with the exception of one reviewer the comments received were brief and not adequately rigorous; and one peer reviewer stated that the nitrate in many of the wells is most likely from a mix of sources which would be challenging to tease apart, probably requiring a much more extensive sampling campaign and more knowledge of well depth and screen lengths.

EPA's response: EPA decided that the document did not require peer review according to the peer review guidelines available in November 2011 and classified the report as "Other" using the OMB work product classification criteria. Although EPA determined at the time it did not need to conduct a formal peer review it did decide to conduct an independent third party review using scientists from the Federal government. EPA asked scientists from USGS, USDA, EPA's ORD, and EPA regional scientists to review the document. EPA received comments on the draft report and incorporated those into the document. EPA provided sufficient time to reviewers and their comments reflect their judgementjudgment on the report. EPA did consider the comments of all reviewers and they helped EPA draw its conclusions including indicating the limitations and uncertainties in the study.

Commented [S17]: Need help on this response.





